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NOTICE.—The postage of this issue of the *S.A. Mining Journal* is: South Africa, 1d. All other parts, 1½d.**CONTENTS.****PAGE**

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Notes and News.

As we go to Press, a very prompt and thought-compelling reply has been issued by Mr. E. A. Wallers, the President of the Chamber of Mines to the latest list of demands to be put forward by the Federation of Trades Unions on behalf of the mine workers of the Rand. Out of the half a hundred arguments he might have used, Mr. Wallers selects two, which he sets out very simply and briefly for the consideration of all concerned—and the whole community, of course, falls into that category. First, he emphasises the outstanding fact that "we are engaged in an industry that cannot by any means pass on to the consumer any increase in the cost of its product." The whole attitude of the mines in the face of increasing costs of stores and labour must be read and judged in the light of that fact. Second, there is the position of the producing mines on the margin of payability. Mr. Wallers makes it plain, with perfect frankness and without exaggeration, that the cumulative effect of the demands for higher wages is in danger of leading to the closing down of many of the lower grade mines. He quotes the typical case of the E.R.P.M., of which he is chairman, and shows how delicate the position is. Mr. Wallers declares that the low grade mines "are with great difficulty just keeping their heads above water, and it will be seen at once that an increase of any importance in their working costs will very easily and quickly bring them to the point at which they would necessarily have to cease operations." He indicates very briefly what this would mean to the country. "There are to-day not less than 15 mines which, under present conditions, are in some cases not paying their way and in others just making ends meet. Those 15 mines are producing annually gold to the value of £7,200,000, which is wanted for Imperial needs; they are employing 5,400 white men, they are distributing in wages, stores, etc., approximately £7,000,000 per annum, and they are supporting whole Reef districts and communities. The owners of those mines, i.e., the shareholders, are receiving nothing, nor is there any hope of their receiving anything while present conditions prevail." Mr. Wallers closes with a word of warning, that is tantamount to an appeal to commonsense:

"I know," he adds, "it will be said by some that this old bogey of closing down mines has been raised by the industry before when faced in the past with demands from its workmen, and that the granting of those demands has not closed down any mine. My reply to that is quite definite. Whatever over-statements may have been made in the past by either employer or employed do not concern us now. We are faced during this war with a very different set of conditions, and I have by no means over-stated them. In these days of labour shortage and restriction of importation of stores, the closing down of some low grade mines would solve those difficulties for the higher grade mines, but would be a disastrous affair for the community as a whole. Let us make no mistake about it—we, the employers and the employed, if a catastrophe is to be averted, must make every effort we are capable of to work together, not against one another; above all, we must think together before we do or say anything that may mislead others."

Mr. Wallers has put the two cardinal facts of the situation so clearly that no one can fail to understand. If the latest demands should lead to disaster, at any rate the community cannot complain that the official spokesman of the industry has failed to warn it in time, and in the plainest possible terms.

* * * *

When, towards the end of last year, the annual meeting of the Daggafontein Prospecting Syndicate was held, the chairman (Mr. George Lawson Johnston) said that the question of winding up was under discussion with the Henderson's Transvaal Estates, the largest shareholder. Henderson's regard the present time as favourable for liquidation, and a meeting with this object has been held. The Prospecting Syndicate seems to have fulfilled its original purpose, for the Daggafontein Mines is fairly launched. The nominal and issued capital of the Syndicate is £60,000 in

£1 shares, and according to the official notice the winding-up now will enable the liquidator to make a distribution of one fully paid share in the Daggafontein Gold Mining Co. and a cash payment of approximately 10s. per share. The Daggafontein Gold Mining Co. disposed of its mining property and assets to the Daggafontein Mines for 398,033 fully paid shares, of which 129,780 were handed over to Henderson's Transvaal Estates in payment of indebtedness, leaving a balance of 268,253 shares. The Daggafontein Gold Mining Co. has an option over 134,126 Daggafontein Mines shares at par, current for something like another two years.

According to London advices, diamond market conditions continue very favourable, and all classes of goods are in keen demand. Industrial sorts particularly are to the fore at rising prices, and the position all round is highly satisfactory. It is encouraging to note that insurance rates are slightly easier; that to Holland is down to between 3 and 4 per cent., and the American rate also gives indications of declension shortly. The latter was quoted as high as 8 per cent.; but it is supposed to be 5 per cent., or under, at the present time. This all assists the position, and a return to anything like normal figures will mitigate the new tax that the Americans are levying on all luxuries. So far, however, the demand from the States has not fallen off, despite the increase in taxation; and although the months of June and July are a slack period for diamond business, and a large number of transactions is consequently not to be looked for, it is confidently expected by the trade that the autumn buying will be greater than ever.

Namaqua costs showed a considerable advance last year upon those of 1915; as, however, the copper produced realised high prices, the profit rose from £39,083 in 1915 to £64,960. The diminution in the output was only slight, "but the difficulties in carrying on have enormously increased since the commencement of 1917." Dividends equal to 25 per cent. are paid, an increase of 5 per cent., and it is proposed to appropriate £15,000 towards the purchase and cost of running a small steamer to ply between Port Nolloth and Capetown carrying fuel and copper produce.

The ordinary general meeting of the Oceana Development Company, Limited, was held in mail week at Winchester House, Old Broad Street, E.C. Mr. R. C. Bromhead presided, and, in moving the adoption of the report for 1916, explained that the company's liabilities, which in the previous balance sheet figured at £11,383, had been reduced to £4,559, and this lower sum was fully covered by liquid assets, apart from the value of their estates. Developments on the Far East Rand had continued to show satisfactory progress, and tended to confirm the confidence which the directors held in the results of the operations to be undertaken on the Eendracht and Kopjeskraal properties. Mr. S. S. Kennedy seconded the motion, and the report was adopted after some remarks by Mr. G. R. Bonnard, who has entered into a contract with the company to develop its properties.

In another part of this issue will be found the first of a valuable series of articles on the economic geology of the iron ore deposits of the Pretoria Townlands, by Prof. Stanley and Dr. P. A. Wagner. The reports are published by kind permission of the Pretoria Municipality, which deserves credit for taking the initiative in the exploitation of the deposits. The summary and recommendations of the authorities in question is as follows: "(1) A very considerable tonnage of iron ore of good quality is available on the Pretoria Townlands in the so-called 'clay-band' and an enormous tonnage of somewhat lower grade silicious ore in the Timeball Hill beds. (2) The clay-band ore is undoubtedly worthy of exploitation,

and while the Timeball Hill ironstone is not amenable to concentration, the better grades of this material can also, in our opinion, be smelted at a profit, especially if mixed with the clay band ore. (3) As a preliminary to the exploitation of the deposits, we consider it essential that they should be opened up at regular intervals by trenches and prospecting pits and systematically sampled under careful supervision, in order to determine where the best values and widths are situated, and also in the case of the clay band, to enable a reliable estimate of the tonnage of workable ore to be made. The information obtained would also be invaluable when deciding upon the most suitable site of the suggested smelting works. (4) Having regard to present conditions, the smelting of these ores on the small scale should be technically and commercially successful, and the erection of a small blast furnace burning charcoal and capable of producing, say, 100 tons of iron per week is recommended as being the best and quickest way of turning the ores to account. The capital cost should not exceed £12,000, and the working cost would be about £6-£10 per ton, while the selling price would be two or three times this figure. There are good prospects that this small beginning would eventually expand into a large iron and steel industry."

With a view to co-ordinating information as to and assisting the development of the Empire's almost inexhaustible mineral resources, an Inter-Departmental Committee has been appointed to prepare a scheme for the establishment in London of an Imperial Mineral Resources Bureau (a) to collect information in regard to the mineral resources and metal requirements of the Empire, and (b) to advise what action, if any, may appear desirable to enable such resources to be developed and made available to meet requirements. The appointment of the above committee is the first step taken by the Imperial Government to carry out a definite resolution of the Imperial War Conference, and is a natural corollary to the establishment last April of a new branch (under the control of Sir Lionel Phillips) of the Ministry of Munitions "to deal with the examination and development of such mineral properties (other than coal or iron ore) in the United Kingdom as are considered likely to be of special value for the purposes of war." The latest committee, as will be seen from its constitution given elsewhere in this issue, is a strong one, Canada, New Zealand, and South Africa being represented by their High Commissioners. The chairman, Sir James Stevenson, is Director-General of the Department of the Inspection of Munitions.

A Johannesburg representative of prominent New York exporters informs us that he has been instructed by cable during the week to accept orders with the qualification that they are subject to war risks and to a permit from the United States Government. Whether this advice means much or little remains to be seen; but, combined with the list of prohibited imports from the U.S.A., it points to a considerable restriction of trade with that country.

It is noteworthy that the Real Estate activity is very pronounced on the Far East Rand. Stands sold at Brakpan up to July 7th numbered 563 (business), which realised £103,226; 860 residential sites, which realised £48,099. Stands sold at Springs up to July 7, were as follows: 125 business, realised £38,753; 94 residential, realised £5,890. The Brakpan Township was formed in 1910. The Springs Township (new portion) was formed in November, 1916. Springs is surrounded by Geduld, Springs and Daggafontein mines, and the four new Government Leases now open for tender, besides other areas belonging to Messrs. Lewis and Marks, Cassel Coal Co. and Lace Proprietary Mines. Many well-known Johannesburg firms have recently purchased business stands in both townships.

Real Estate Activity on the Far East Rand.

A Pretoria Iron Industry.

TOPICS OF THE WEEK.

THE UNREST AMONG THE MINERS.

Emboldened by the substantial concessions recently offered by the mines and readily accepted by the Executive of their Union, the mine workers are now asking for more. It will be recalled that the recent offer of the Chamber of Mines to the South African Mine Workers' Union with regard to the employment of non-union men, colour bar, and underground working week of 48½ hours "bank to bank," the establishment of a Standing Joint Conciliation Committee, etc., which was accepted by the Executive of the Mine Workers' Union, was dependent upon the Union so amending its Constitution as to prevent sectional action by its various branches. The members of the Union, however, on a ballot, refused to make the necessary alteration in their Constitution, and, in consequence, the Chamber's offer is in abeyance. Not only that, but the delegates of the various sections of the Union at a meeting last Sunday formulated some 21 further demands, which are to be presented next week to the Chamber of Mines. These demands have already found their way into the Press, doubtless at the behest of the officials of the Union, and we put them on record elsewhere in this issue, as a curious and interesting example of labour opportunism that otherwise may fail to be credited in days to come. Some of these demands, it will be seen, mean much more than they seem to; others, possibly, through an exaggerated respect for economy of words, mean nothing at all. Most, however, are plain enough. Sweeping as are the demands for ideal pay all round, combined with the reduction of the working time to the fewest possible number of crowded hours compatible with a pretence of earning that pay, the programme contains other even more questionable features. Calmly it is asked that debatable subjects such as that of discharges and declarations "be abolished"! And that methods and systems of working evolved by the mine managers out of their years of experience should be "scrapped" in favour of others now preferred by the sectional delegates of the Workers' Union. It is because the principles involved in these demands of the delegates are of so fundamental a nature that, for the life of us, we cannot see how they can be seriously put forward by people who have had any lengthy practical acquaintance with the mining industry. Under the close analysis of the representatives of the mines, or of unbiassed "neutrals," doubtless they will soon be resolved into their clearly contradictory and illogical, where not merely combative and obstructionist, constituents. As we go to press, the President of the Chamber of Mines has issued a straight talk on the main issues at stake. And this brings us to the question which many people are now asking, as to what is behind this canker of unrest among the men. Earlier in the war the same trouble was noticeable in England, and threatened at one time to deliver over the country to its enemies. Fortunately, the danger was averted, though only just in time; and it may help us here at this juncture to recall some of the lessons of that crisis. Thus the following warning given by one of the leading exponents of British engineering opinion may be cited:

"What is needed in the trade unionist, if the horizon is to be kept clear of clouds, is a loyal faith in his accredited leaders, who are in touch with the Government and employers, and know the true inwardness of the situation and the ability to discern at once the cloven hoof of the enemy in labour agitations worked up in defiance of trade union executives. This is not written without a sound reason. . . . Any such danger, supposing it exists, could and should be easily met if the fact is kept in mind, that the present safety of the country, and our hopes of future industrial expansion, depend upon the cohesion of all classes and interests now, and that any influence, in an opposite direction may be rightly regarded with suspicion, as emanating from enemy sources, in spite of any "rights-of-the-working-classes" guise it may assume. Coverly, this influence is still operating. Those who know the labour situation best are not blind to the fact. It may not succeed in creating another trouble such as that recently settled, but it may make an attempt to do so."

This is pretty plain speaking, and should give food for thought to the loyal trades unionists of the Rand. Fortunately, these and similar warnings proved entirely

successful in allaying the unrest among those to whom they were addressed in the first instance. To the extent that they may be regarded as in a measure applicable to the Rand to-day, it may be hoped that they will prove equally efficacious. At any rate, it is no harm to remind all concerned that the relations between employees and employed in any war industry such as gold mining to-day involve graver issues than appear on the surface, and for that reason the responsibility is all the greater upon the people who disturb those relations.

The directors' report of the Central Mining and Investment Corporation, Ltd., for 1916, just published, fully justifies the policy adopted by the Board of writing down the capital last year

from £12 per share to £8 per share. The cash holdings now amount to £545,132, as compared with £351,716 at the end of 1915; while loans have been reduced to £603,242 as against £684,544. The investments total £6,378,179, of which £2,797,609 represent South African investments. The cash assets largely exceed the liabilities, and will place the Corporation in a favourable position to expand its operations after the war. The profits for 1916 amount to £366,393—an increase of £41,365; and dividend payments have been resumed with a distribution of 5 per cent. tax free; while £150,000 is appropriated for the establishment of a reserve fund; and £70,863 is carried forward, as compared with £24,470 brought in. The new and more conservative policy of valuing the shareholdings at or under average cost prices, has been introduced in conformity with the practice adopted by the Rand Mines, Limited. The chief feature of the balance sheet is the decrease of over a million and a quarter in the interests held. The shrinkage has been contributed to by a heavy writing down of enemy stocks, while investments in British Government securities have been further increased, and the cash assets largely exceed the liabilities. One of the chief new points as regards undertakings in which the Corporation is interested is the resumption of operations on a small scale by the Magadi Soda Company. The report adds that business in South Africa continued satisfactory. The investment demand for account of the Cape has probably equalled some of the most active periods of the past, but, owing to the absence of European support, the aggregate volume of business did not reach previous records. The demand centred more particularly on properties of the Far Eastern Rand. The tender of the Corporation for the 651 claims on the Fann Modderfontein No. 17 was accepted, and a company entitled "Modderfontein East, Ltd.," is now being formed in the Transvaal to incorporate and work these areas. The Rand Mines, Ltd., and several other South African groups, are participating with the Corporation in the provision of the working capital. Further particulars concerning the new company are given in the consulting engineer's report. The Brakpan Mines, Ltd., tendered for the ground south of their present workings, with a view to its incorporation in their property, and secured the lease. We append an analysis of the accounts for the past three years:—

	1916.	1915.	1914.
	£	£	£
Issued capital	3,400,000	5,100,000	5,100,000
Créditors	3,787,195	3,667,600	3,108,732
Reserve Fund	150,000	—	—
Dividend Payable	170,000	—	—
Shares and Investments	6,378,179	7,642,162	6,117,398
Debtors, less reserves	51,505	47,270	61,788
Head Office Loans	603,242	684,544	1,195,095
Cash, less reserves	545,132	351,716	551,990
Receipts and Profits	429,061	375,926	339,888
Expenses and Taxes	62,668	50,898	49,099
Net Profit	366,393	325,028	290,798
Dividend	170,000	—	127,500
Depreciation	—	306,097	663,074
To Reserve	150,000	—	—
Brought Forward	24,470	*5,539	24,316
Carried Forward	70,863	24,470	24,539

* After deduction of £19,000 payment to participating directors.

THE IRON ORES ON THE PRETORIA TOWN LANDS.—I.

[By P. A. WAGNER, Dr. Ing., B.Sc., F.R.S. (S.A.), M.A.I.M.E., AND G. H. STANLEY, A.R.S.M., F.I.C., M.I.M.M., M.I.M.E.]

THERE are four distinct iron horizons in the Transvaal System as developed in the neighbourhood of Pretoria. These are:—

- (1) The uppermost beds of the Dolomite Formation.
- (2) The Timeball Hill zone of the Pretoria Series.
- (3) The so-called "clay-band," situated some little distance above the uppermost quartzite bed of the Timeball Hill horizon.
- (4) The shales and associated rocks immediately underlying the Daspoort quartzite zone of the Pretoria Series.

They will be dealt with in order of enumeration.

1.—THE DEPOSITS IN THE DOLOMITE.

Near Ashbury Siding there is a fairly considerable development in the uppermost beds of the dolomite formation of impure, earthy manganiferous ironstone, the deposit in places attaining a thickness of over 15 feet. A representative sample of this material was analysed some years ago with the following result:— SiO_2 64.9 per cent., Fe_2O_3 20.0 per cent., MnO_2 2.2 per cent., Al_2O_3 2.0 per cent., MgO 3.0 per cent., moisture 7.4 per cent.; total, 99.5 per cent. These figures show the rock to be too poor in iron and manganese to be of value as a potential source of either metal.

2.—THE DEPOSITS OF TIMEBALL HILL ZONE.

The so-called Magnetic Quartzite of the Timeball Hill Zone occurs in two main beds of remarkable persistence that crop out conspicuously in the hills immediately south of Pretoria, of which over considerable distances they form the crests. The beds are conformably interstratified with the Timeball Hill quartzites and shales, being separated by from 95 to 150 feet of shale. The upper is the more important of the beds. It ranges in thickness from 9 to 20 feet, the average being about 12 feet. The lower bed appears to average about four feet in thickness, the maximum being six feet. Owing to the rapid removal by weathering of the soft shale underlying the ironstone, and highly resistant character of the latter, the beds are in places tilted backward—southward—at the surface, the width of the outcrops being in consequence very considerably in excess of the normal widths, and thus apt to give an erroneous impression of thickness of the ore. This is well seen in the small railway cutting immediately south of Pretoria Railway Station, where the width of the outcrop of the upper bed, which is here about 10 feet thick, is fully 35 feet. As a consequence of the powerful faulting that has affected the Transvaal System in and around Pretoria, the Timeball Hill zone is duplicated over a very considerable distance, with the result that the amount of iron ore within the municipal area is enormously greater than it would otherwise be. Thus, the actual lengths of outcrop, on the Pretoria Town Lands, of the upper and lower beds of ironstone respectively, are about $21\frac{1}{2}$ and 21 miles. The beds dip to the north at an average angle of about 35° , and without doubt persist to far greater depths than are likely ever to be attained in mining. They underlie practically the whole of the Town Lands north of the Klapperkop Range, and the upper bed would, for example, be struck below Church Square at a depth of roughly 3,600 feet. The reserves of ore in the two beds are thus for all practical purposes inexhaustible.

Mineralogical and Petrographical Characters of the Ore.—The Timeball Hill ore in its typical development is best described as an arenaceous oolitic ironstone, the designation of magnetic quartzite commonly applied to it being wholly inappropriate. It is a fine-grained, hard, feebly magnetic rock of very deep reddish-black colour, composed of small grains of quartz set in an abundant matrix of iron oxides. The relative proportions of quartz grains and matrix vary

considerably at different points. In places the quartz appears to be uniformly distributed through the rock, but as a rule the ironstone is more or less distinctly banded, being made up of alternations of quartz-rich and quartz-poor layers. The quartz grains range in diameter from .85 to .65 millimetres. They are for the most part sub-angular, though perfectly rounded grains are by no means uncommon. Under the microscope the dark matrix is seen to be composed very largely of small ellipsoidal, or more rarely spherical oolitic, grains, varying from .28 to .13 millimetres in diameter. These consist, as a rule, of a nucleus—either a minute granule of quartz or a sphere or ellipsoid of a deep brownish-red translucent substance—surrounded by alternations of thin concentric layers of black, lustrous martite and the brownish red substance already referred to, and a thicker outer rim of martite, in which a radial structure is frequently developed. In the deep brownish-red substance entering so largely into the constitution of the oolites, and which is evidently composed largely of iron oxide, minute flakes of green pleochroic chlorite can occasionally be made out, and where, as is sometimes the case, the mineral preponderates, the nuclear portion of the oolites has a greenish-red colour. The oolites were evidently formed by the deposition in shallow water strongly agitated by waves and shore currents of successive layers of ferruginous mud around particles of quartz or minute pellets of clay.

Scattered indiscriminately through the quartz-rich and quartz-poor layers of the rock are sharp-edged octahedral crystals of martite. These replace oolites as well as quartz grains, and are frequently developed in the peripheral portions of the latter. They evidently owe their origin to the re-crystallisation of portion of the iron content of the rock, the martite being probably pseudomorphous after magnetite. The interstices between the oolites and between the quartz grains, where these happen to be in contact, are occupied by iron oxides and flakes of chlorite. So firm and strong is this cement that the rock on being crushed breaks indiscriminately across quartz grains and matrix. This, together with the fact that the larger quartz grains are almost invariably in contact with the iron-rich peripheral portions of the oolites, or with crystals of martite, renders it impossible effectually to separate the quartz from the iron minerals by crushing. We found, for example, that even after the ore had been ground to pass through a 200-screen—that is, a screen with 40,000 holes to the square inch—most of the quartz grains still had particles of iron oxide adhering to them and vice versa, which serves to explain how it is that the concentrate obtained by magnetic or wet separation invariably contains a fairly considerable percentage of silica, and the tailing a good deal of iron.

(To be continued.)

ANSWERS TO CORRESPONDENTS.

- "Ex-Shareholder."—The report has been issued, and will be reviewed in our next issue.
- "Digger."—(1) Rumours of such a discovery have reached us; but nothing definite is yet known. (2) In the Bechuanaland Protectorate.
- "Industry."—The S.A. National Union publish a directory of the sort you require. Write to the Secretary, S.A.N.U., Stock Exchange Buildings.
- "Nervous."—(1) Yes. (2) About seven years. (3) You can hardly do better.
- "Copper."—Prospects uncertain; better leave it alone.
- "Bismuth."—Next week.
- "Interested."—Yes; a big coal combine of Hendersons and former Coal Trust interests is on the tapis, and an official statement will be issued soon.

THE JUNE GOLD OUTPUT IN DETAIL.

Falling Off Due to Labour Shortage.

The Transvaal gold output for June was declared by the Chamber of Mines at 759,724 ozs., of the value of £3,227,101, a decrease compared with May, which had one more working day, of 19,661 ozs., and in cash value £83,517. The shortage of native labour is being severely felt by the producing companies, and has affected both tonnage and yield.

For the half-year the total production was 4,572,936 ozs., valued at £19,424,597, a decrease compared with the first half of last year of 58,928 ozs., and in value £250,322. For the purpose of comparison a table giving the output month by month is appended.

The details of the June output are:—

Total output	759,724 ozs.
Value	£3,227,101
Decrease	19,661 ozs.
Value	£83,517
Witwatersrand	732,799 ozs.
Value	£3,112,732
Decrease	20,552 ozs.
Value	£87,299
Outside Districts	26,925 ozs.
Value	£114,369
Increase	891 ozs.
Value	£3,782
Stamps	9,525

THE CONTRIBUTING MINES.

	Value.	Increase.	Decrease.
Aurora West	£18,605	—	85
Bantjes Cons.	23,103	904	—
Brakpau Mines	98,908	276	—
City Deep	122,148	—	5,365
City and Suburban	46,988	—	1,211
Con. Langlaagte	62,331	—	1,032
Con. Main Reef	43,641	—	1,534
Crown Mines	235,116	—	5,747
Durban Roodepoort	13,975	—	382
Durban Deep	36,000	—	539
E.R.P.M.	164,604	—	6,626
Ferreira Deep	69,412	—	6,507
Geduld Prop.	54,388	187	—
Geldenhuis Deep	65,041	—	2,345
Ginsberg	13,971	—	153
Glencairn	13,516	—	310
Government Areas	165,169	—	8,525
Jupiter	24,055	—	—
Knights Deep	71,175	—	3,577
Knight Central	27,759	—	1,546
Langlaagte Estate	51,873	—	1,071
Luipaardsvlei	24,123	—	420
Main Reef West	27,156	—	3,033
May Consolidated	4,294	—	9,634
Meyer and Charlton	39,117	1,431	—
Modder B	105,620	2,549	—
Modder Deep	80,970	—	43
New Goch	19,803	—	1,695
New Heriot	22,339	264	—
New Kleinfontein	90,043	—	1,326
New Modder	125,087	—	1,470
New Primrose	14,294	—	594
New Unified	13,440	—	484
Nourse Mines	51,720	—	2,927

	Value.	Increase.	Decrease.
Princess Estate	27,007	—	1,538
Randfontein	206,214	8,015	—
Robinson	64,697	—	2,545
Robinson Deep	51,753	—	8,109
Roodepoort United	32,321	—	2,782
Rose Deep	65,657	—	8,946
Simmer and Jack	75,945	3,045	—
Simmer Deep	49,189	1,126	—
Springs Mines	65,381	3,084	—
Van Ryn Deep	92,278	—	1,495
Van Ryn Estate	45,757	710	—
Village Deep	82,058	1,531	—
Village Main	39,168	522	—
West Rand Cons.	33,383	—	1,389
Witwatersrand	48,717	314	—
Wit. Deep	41,509	—	4,137
Wolhuter	42,031	—	2,600
Miscellaneous	6,823	—	9,538
Totals	3,112,732	23,961	111,200

OUTSIDE DISTRICTS.

Barrett	1,143	—	17
Glynn's	8,113	—	463
Nigel	16,872	—	1,831
Sheba	7,187	242	—
Sub-Nigel	23,511	828	—
T.G.M.E.	31,697	—	475
Miscellaneous	25,846	5,568	—
Totals	114,369	6,568	2,786

Rand Mines Group.

The following are the results of crushing operations of Central Mining companies for the month of June:—

Company	No. of Stamps Running.	Tube Mills.	Tons crushed.	Estimated Working Costs per Ton.	Total Fine Ozs.	Total Estimated Profit.
Bantjes Cons.	90	3	20,640	23/11/1	5,439	*£2,030
City Deep	154	9	57,500	22/ 7/0	28,755	55,449
Crown Mines	660	26	180,000	18/ 7/3	55,351	62,718
Durban Rd. Dp.	100	3	27,100	23/11/8	8,475	2,707
Ferreira Deep	280	7	45,750	21/ 7/1	16,341	19,219
Geldenhuis Dp.	300	7	51,200	20/ 2/7	15,312	8,847
Modder B.	696	6	44,500	19/ 6/1	24,864	59,984
New Modder	180	7	55,000	20/ 2/0	29,448	66,998
Nourse Mines	180	5	38,000	21/ 0/5	12,176	5,086
Robinson	230	6	52,100	15/ 5/1	15,231	23,911
Rose Deep	300	7	52,600	17/ 1/9	15,457	18,491
Village Main R.	160	4	27,200	18/ 6/7	9,221	13,036
Village Deep	180	7	54,100	22/ 2/0	19,318	20,443

Tls. & averages 2910 97 708,690 20 0/3 255,388 £354,809

a Includes 4 Nissen stamps. b Includes 16 Nissen stamps.

* Loss.

Decreased profits shown are due to reduced tonnages consequent upon present unsatisfactory native labour position.

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Barnato Group.

The results of operations of the Barnato group for May are as follows:—

Mine.	Stamps.	Tons Crushed.	Revenue from Gold
Consolidated Langlaagte	100	51,600	£62,330
Ginsberg	75	15,240	13,971
Glencairn Main Reef	160	20,550	13,514
Government G.M. Areas	200	113,000	165,198
Langlaagte Estate	200	44,930	52,412
New Primrose	140	20,600	14,295
New Unified	60	13,600	13,440
Randfontein Central	700	164,126	206,244
Van Ryn Deep	80	42,500	92,280
Witwatersrand	215	10,050	48,719

Totals & averages ... 1930 526,196 £682,403

May totals ... 1930 551,434 £687,204

Mine.	Total Working Costs.	Working Costs per Ton Milled. Shillings.	Gross Profit including Sundry Revenue.
Consolidated Langlaagte	£42,301	16/396	£20,256
Ginsberg	12,499	16/403	1,569
Glencairn Main Reef	12,515	12/180	1,131
Government G.M. Areas	106,654	18/877	59,000
Langlaagte Estate	41,938	18/668	10,778
New Primrose	13,377	12/987	1,008
New Unified	9,459	13/910	4,042
Randfontein Central	169,320	20/633	40,003
Van Ryn Deep	40,848	19/223	52,563
Witwatersrand	34,139	17/048	16,156

Totals & averages ... 483,050 18/360 £206,506

May totals ... £492,317 17/855 £200,264

Monthly Gross Profit, 1917.—January, £232,859; February, £213,944; March, £225,477; April, £210,598; May, £200,264; June, £206,506.

Goerz Group.

Results of operations on the producing mines of this group for the month of June:—

Company	Stamps.	Tons Crushed.	Total Revenue.	Revenue per ton
Geduld Proprietary	80	37,000	£54,757	29/ 7
Modder Deep Levels	70	40,900	80,696	39/ 5
Princess Estate	60	21,000	27,177	25/11

Totals ... 210 98,900 £162,620 —

Company.	Costs.		Profit.	
	Total.	Per Ton.	Total.	Per Ton
Geduld Proprietary	£35,056	18/ 11	£19,701	10/ 8
Modder Deep Levels	32,695	16/ 0	47,991	23/ 5
Princess Estate	27,117	25/10	60	0/ 1

Totals ... £94,868 — £67,752 —

Remarks.—Princess Estate results for June adversely affected by ignition of large wooden pack in No. 8 Level. Operations are now back to normal. Loss is covered by insurance.

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Consolidated Gold Fields Group.

The following are particulars in regard to the outputs and profits for the month of June of the undermentioned companies of the Consolidated Gold Fields group:—

Company.	No. of Stamps.	Tube Mills.	Tons Crushed.	Gold declared, Fine Oza.	Total Profit.
Simmer and Jack	320	7	60,700	16,979	£22,530
Robinson Deep	120	7	41,500	12,890	3,817
Knights Deep	409	14	98,000	16,756	3,671
Simmer Deep	220	10	49,300	11,579	2,619
Jupiter	80	5	23,300	5,663	751
Sub Nigel	30	2	9,230	5,385	7,593

Totals ... 1170 42 282,030 69,252 £40,984

The sundry revenue included in the above total declared profit is as under: Simmer and Jack, £1,500; Robinson Deep, £136; Knights Deep, £71; Simmer Deep, £572; Jupiter, £518; Sub Nigel, £158; total, £2,985.

NOTE.—Robinson Deep.—Reduced profits are due to shortage of native labour and temporary falling off in grade. During the last few days of the month tonnage and grade have shown marked improvement. Generally speaking, the shortage of native labour continues to be severely felt on all the mines of the group.

Albu Group.

The June outputs of the producing mines of this group are as follows:—

Company.	Stamps.	Tons Crushed.	Total Cost.
Aurora West	80	14,200	£13,988
Meyer and Charlton	75	14,540	14,285
New Goch	120	20,850	15,931
Roodepoort United	75	31,167	29,958
Van Ryn Estate	140	36,500	28,593
West Rand Consolidated	100	33,530	30,559

590 150,787 £133,314

Company.	Cost per Ton.	Total Revenue.	Profit.
Aurora West	19/ 8/4	£18,291	£4,303
Meyer and Charlton	19/ 7/8	38,575	24,290
New Goch	15/ 3/4	19,465	3,534
Roodepoort United	19/ 2/7	31,960	2,002
Van Ryn Estate	15/ 8/0	47,445	18,852
West Rand Consolidated	18/ 2/7	33,012	2,453

£188,748 £55,434

Van Ryn Estate.—The total revenue includes £2,294 net revenue from farm for the financial year.

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THE MINE WORKERS' LATEST LIST OF DEMANDS.

The following is a detailed list of demands which were submitted at a meeting of delegates of the S.A. Mine Workers' Union last Sunday at the Trades Hall:—

1. Rate of Pay.—30s. per day minimum for two machines; 25s. per shift for machine stoppers for two machines; 25s. per shift minimum hammer developing and 16 boys maximum; 22s. 6d. per shift minimum for hammer stoping and 25 boys maximum; 25s. per shift minimum shaft timberman; 22s. 6d. per shift minimum for stope timbering; 20s. per shift minimum for trammers with blasting certificates; 18s. 6d. per shift minimum for trammers without blasting certificates, trammers not to run more than 30 boys on not more than two consecutive levels; 22s. 6d. per shift minimum for pipe fitters; 22s. 6d. per shift minimum for pump fitters; 20s. per shift of eight hours, minimum, for skipmen, cagemen, onsetters; 16s. 8d. per shift minimum, for eight hours for banksmen; 30s. per shift minimum for shaft sinkers engaged on machines, two machines; 30s. per shift minimum for shaft sinkers with hammer boys—not more than 25 boys; 25s. per shift minimum for reclaimers; 22s. 6d. per shift minimum for riggers and ropemen; 10s. per day minimum for learners for first four months and 12s. 6d. for the next four months, thereafter full pay; 20s. per shift minimum for sanitary men; 20s. per shift minimum for truck repairers; 20s. per shift minimum for winch and electric hoist drivers, £20 per month minimum for mine captain's clerks, 12s. 6d. per shift minimum for unskilled waste packers, for first eight months, and thereafter 20s.; all other workers, 20s. per shift.

2. Hours.—44 hours week, bank to bank, and not less than a six-hour day on Saturday.

3. Contract Prices.—“That there be no further reduction in contract prices at any working place on any mine during the period of the war, or for three months after.”

4. “That all contracts contain a guarantee equivalent to the recognised day's pay for that particular class of work.”

5. “The system of the white man being on contract and the coloured boy being on day's pay be abolished.”

6. “That the whole question of the contract system be inquired into, together with the form of contracts.”

7. “The cost and quality of explosives to be inquired into.”

8. “That the cost of stores revert to pre-war prices.”

9. “The present system of charging men for machine spares, etc., be abolished.”

10. “That no contractor pay a boy drilling under 24 inches in depth. This to be the company's responsibility.”

11. “That no drills or tools be sharpened or repaired by cheap or coloured labour.”

12. “That the war bonus to married men and single men with dependents be increased by 10s. per month, and that all other men earning £26 or less receive a war bonus of at least £1 per month.”

13. “That managers having vacancies for employment apply for men through the District Committee of the Mine Worker's Union.”

14. “That when a man works another man's place that he be paid the full wages due to the absent man.”

SUPPLEMENTARY LIST.

The following is a list of the fresh demands:—

Tracklayers to receive 22s. 6d. per shift.

That no hammermen run machines and no stoppers do any development work.

That candles, carbide, etc., be issued only by phthisis men at a minimum wage of 15s. per day.

That no phthisis money be deducted from war bonuses.

That the whole question of discharges and declarations be abolished.

That where animals are used underground they shall be in charge of a white man.

That the 1st of May be a holiday, and that when it falls on a Sunday the following Monday be the holiday.

CORRESPONDENCE AND DISCUSSION.

Glasgow Royal Technical College: List of War Honours.

To the Editor, *South African Mining Journal*.

Sir,—I herewith send you summary of the honours won by present and past students of the Royal Technical College, Glasgow, which may be of sufficient interest to warrant publication.—Yours faithfully,

JAS. GRAY,

Hon. Secretary, Former Students (Transvaal),
Royal Technical College, Glasgow.

THE ROYAL TECHNICAL COLLEGE, GLASGOW.

Total number of students on active service ... 2,402
Killed or died ... 309

HONOURS.

Victoria Cross	...	...	...	...	2
D.S.O.	...	...	...	...	4
Military Cross	...	...	...	...	55*
Distinguished Service Cross	...	...	...	...	3
Distinguished Conduct Medal	...	...	...	...	9
Military Medal	...	...	...	...	16
Meritorious Service Medal	...	...	...	...	1
Mentioned in Despatches	...	...	...	...	47
Commended for valuable service rendered	...	...	...	...	1
Commended for service in action	...	...	...	...	2

FOREIGN.

Légion d'Honneur	...	...	...	...	2
Croix de Guerre	...	...	...	...	4
Médaille Militaire	...	...	...	...	1
Italian Medad'al Valore Militare	...	...	...	...	1
Russian Order of St. Stanislas	...	...	...	...	1
Serbian Order of the White Eagle (1st Cl. with swords)	...	...	...	...	1
King of Serbia's Gold Medal	...	...	...	...	1
Montenegrin Silver Medal	...	...	...	...	1

Total Honours, 152. Two students twice mentioned.
24th May, 1917.

Consolidated Mines Selection Group.

The following are the results of operations for the month of June:—

	Stamps Working.	Tons Mill.d.	Costs per Ton Milled
Brakpan Mines	100	56,000	20/ 3-0
Springs Mines	60	30,360	22/ 9-4
Totals and averages	160	86,360	21/ 1-7

	Value of Gold declared.	Yield per Ton.	Profit.	Profit per Ton.
Brakpan Mines	£98,525	35/ 2-2	£41,816	14/11-2
Springs Mines	64,693	42/ 7-4	30,111	19/10-0
Totals and averages	£163,218	37/ 9-6	£71,927	16/ 7-9

Neumann Group.

The following are particulars of the results achieved by the crushing companies of this group during last month:—

	TONS	YIELD.	PROFIT.
*Witwatersrand Deep	35,320	£40,639	£6,343
Wolhuter	33,250	41,192	11,424
Consolidated Main Reef	27,400	42,742	14,839
*Main Reef West	24,650	26,589	2,016
Knight Central	26,250	27,204	159

Total for group ... 178,366 £84,781

* Decrease in profits due to reduced tonnage and yield.
Both mines feeling labour shortage.

MINING EXAMINATIONS.

Study for Certificates as Mine Captains, Mine Managers, Surveyors, Mechanical and Electrical Engineers, and Engine Drivers. Private Tuition and Correspondence Lessons, where personal tuition is impracticable. Practical Mathematics and Electrotechnics. E. J. MOYNIHAN, Consulting Engineer, Cutbert's Buildings, corner of Eloff and Pritchard Streets, Johannesburg, P.O. Box 2061.

PERSONAL.

Mr. C. D. Rudd, of Old Jewry, E.C., and Ardnamurchan, Argyllshire, one of the founders of the British South Africa Co. and of the Consolidated Goldfields of South Africa, a partner of the late Mr. Cecil Rhodes, left £147,426.

An American doctor, returned home from Germany, tells the *Buta Tribune Review* that Germany is very short of tin. He knows this because the canned goods on which he was fed were put in *iron* "tins" instead of tins answering to the usual description.

After an exceptionally busy year Professor Yates, accompanied by Mrs. Yates, proceeded to Natal this week. Their absence from Johannesburg is somewhat indefinite, as the Professor contemplates retiring from teaching and settling down in Durban. Mining officials regret his departure, and there is a general hope that after a well-earned rest he will manage to arrange a yearly visit to Johannesburg for a short session.

Mr. A. G. M. Dickson (sub-governor of the National Bank of Egypt, Alexandria) has been appointed manager of the British Trade Corporation, which has been incorporated by Royal Charter, with an authorised capital of £10,000,000, in shares of £10 each. Of the first issue of £2,500,000, one million has already been subscribed and allotted to comply with a condition of the charter that business should not be commenced until that amount has been subscribed. The remaining £1,500,000 will be offered to the public at an early date.

At the Oceana Development annual meeting, Mr. E. R. Bonnard made a short speech. He observed that "it would be wrong to attempt to suggest that there was a practical certainty of getting the reef at comparatively shallow depths," but he believed there was "an excellent chance" of finding the Van Ryn and Nigel reef in the eastern portion of the farm Eendracht. To secure a good boring expert had taken time, but now that surveying had started, under the direction of Mr. Sidney C. Dyer, drilling would start at the earliest possible moment.

The following is a list of certificates issued by the Mines Department for the period ending 30th June, 1917:—
Mine Managers' Certificates (Metalliferous): A. C. Bisset, E. J. Bolitho, T. N. Dewar, L. R. Gaul, S. R. Jameson, W. F. Kitto, A. S. Knight, C. H. Langley, L. V. Melville, W. M. Munro, W. Nash, A. Ornstein, F. G. Peckham, J. D. F. Schleiss, J. Thorlund. (*Coal*): J. S. Baird, A. E. Baker, W. Hampson, J. Macvie, G. Orr, T. J. Thomas, J. L. Watson. *Mine Overseers' Certificates (Metalliferous)*: W. Brooke, R. F. Caulkett, E. J. Chirgwin, K. V. Cunliffe, E. F. Van Breda, F. J. S. R. Heywood, W. S. Hunter, T. Jones, A. B. Kennedy, T. Paxton, J. Ralph, S. K. G. Stewart-Mackenzie, H. L. Douglass. (*Coal*): S. W. Barlow (non-flery mines), D. Cullen (non-flery mines), D. J. Evans. *Mechanical Engineers' Certificate*: P. G. Timms. *Electrical Engineers' Certificate*: J. H. Paul.

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Box 4777.

According to the London papers, it is with great regret that the City in general, and the Mining world in particular, has heard of the retirement of Mr. Richard Rous Mabson, F.R.S., F.J.I., etc., from his 37 years' joint editorship of the *Statist*. Mr. Mabson had become an institution rather than an individual, and one had imagined he would go on for ever; but, after all, a man of 70—he was born in Yarmouth in 1846—is entitled to a rest after such arduous labour as his has been. A man of unrivalled integrity and of unassuming industry, Mr. Mabson has never spared himself, and if he had never done anything more than play a prominent part in getting mining to be recognised more and more as a legitimate and patriotic business, rather than a mere medium for Stock Exchange operations he would have had a good life's work to his credit.

The following officers have been elected by the Congress of the South African Association for the Advancement of Science: Dr. C. F. Juritz, president; Messrs. H. E. Wood, W. Ingham, A. H. Reid, and Prof. W. N. Roseveare, vice-presidents; Rev. Dr. W. Flint and Mr. J. A. Foote, general secretaries; and Mr. A. Walsh, general treasurer. The following were elected members of the Council: Cape Peninsula, Profs. Brown, Crawford and Leslie, Mr. R. W. Menzies and Mr. C. W. Mally; Port Elizabeth, Rev. J. R. L. Kingon; King Williamstown, Mr. J. Leighton; Middelburg, Mr. A. Stead; Stellenbosch, Profs. Morrison and Godard; Johannesburg, Messrs. J. Burt-Davy, P. Cazalet, Dr. W. A. Caldecott, Lieut.-Colonel Dobson, Profs. H. B. Fantham, G. H. Stanley, C. E. Moss and J. A. Wilkinson; Dr. A. J. Orenstein, Messrs. R. T. A. Innes, J. W. Kirkland and H. A. Trubshaw; Pretoria, Profs. H. A. Wagner, W. A. Macfadyen, D. F. Malherbe, and Mr. I. B. Pole Evans; Potchefstroom, Mr. E. Holmes Smith; Bloemfontein, Prof. M. M. Rindl and Dr. T. F. Dreyer; Durban, Mr. M. S. Evans and Dr. C. T. Loram; Maritzburg, Mr. J. S. Henkel and Prof. E. Warren; Bulawayo, Rev. S. S. Dorman; and Lourenco Marques, Mr. S. Seruya. An invitation from the Mayor and Council of Johannesburg to hold the next annual session here was heartily accepted.

The Hlobane Colliery, Natal, is advertising for a certificated mine manager. Applications to the Vryheid (Natal) Coal and Railway Company, Box 35, Durban.

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THE WEEK IN THE SHAREMARKET.

Continued Depression—Improvement in Tins—T.G.M.E. Better.

The promise of Friday last was not maintained on Saturday morning. The market became stagnant once more. The best features were Modder B and Deeps and City Deeps. Sub-Nigels, Springs and Government Areas somewhat on the weak side. There was no improvement on Monday morning, except in Van Ryn Deeps. Brakpans, City Deeps and Rand Selections were firm; but Sub-Nigels, Springs and Government Areas were all lower. The Modder trio were passed without sales, and the volume of business was small. The market was dull to the close, with no improvement in prices. Tuesday morning was a repetition of the previous day's performance, with the weakness in Springs Mines accentuated. Rooibergs had an unexpected spurt, closing 8s. buyers, declining subsequently to 7s. 9d. Kleinfonteins were also better, otherwise the decline was general.

* * * *

The market continued its downward course on Wednesday, the only stock showing an improvement being Transvaal Gold Mining Estates. The Modder group were notably weak, Modder B's, for which £7 12s., ex dividend, was bid on Saturday, being sold at £7 8s. Prices were slightly harder on Thursday morning, with the exception of Springs Mines. Tins looked up in Zaaipplaats and Rooibergs, the latter closing 9s. 3d. buyers. The unlisted stocks have not been in much demand. The following were the sales and quotations: Sales: Montealeos from 51s. to 45s.; Invicta, 23s.; Henderson's Options, 1s.; Sakalavas, 4s.; Phoenix, 10d.; Modder East, 19s., and the options 7s.; Rietspruits, 4s. to 7s. 9d. Other quotations: Union Tin, 3s. 3d. to 3s. 6d.; Areachaps, 5s. buyers; Newfarms, 1s. 10d. to 2s. Sales took place of Randfontein Debentures, at £84 and £85.

* * * *

On Friday morning the advances outnumbered the falls. Among the latter were Modder B's at £7 9s. sellers, the buying bid being £7 8s.; Rooibergs came back to 8s. 6d. sales and sellers; and Knight Centrals to 3s. Wit Deeps were 10s. 3d. buyers, and Zaaipplaats 5s. 6d. to 5s. 9d. The advances were: Kleinfonteins, with sales at 18s. 9d.; Bantjes at 4s., and the following at buying prices: Con. Mines Selection 23s. 6d.; Main Reefs 15s. 9d.; Con. Langlaagtes 21s.; Natal Navigations 18s. 6d.; New Era 8s. 11d.; Springs 56s.

* * * *

	Fri. 6th.	Sat. 7th.	Mon. 9th.	Tues. 10th.	Wed. 11th.	Thurs 12th.
African Farms	8 0†	8 0†	7 9*	8 0†	7 6*	7 6*
Apex Mines	6 9†	7 0†	—	7 0†	7 0†	7 0†
Aurora Wests	14 6	—	15 0†	—	13 0†	—
Bantjes Con.	4 0	4 3†	4 2	4 0	3 0*	3 9*
Brakpan Mines	93 6*	94 0*	93 6*	93 6*	93 6*	92 6*
Breyten Colls.	16 0†	16 0†	—	—	—	15 0†
Brick and Potteries . .	5 0*	5 0*	—	—	5 0*	5 0*
British South Africa . .	—	10 0*	—	10 0*	—	10 0*
Bushveld Tins	0 3*	—	0 3*	0 3*	—	—
Cinderella Cons.	—	4 0*	5 0*	4 0*	4 0*	4 0*
City and Suburbans . .	24 6*	24 6*	24 0	24 6†	23 6*	23 6*
City Deeps	73 6*	74 3	74 6	74 0	73 0	73 0
Cloverfields	8 1*	8 0*	—	7 9*	8 0*	—
Clydesdales	12 0*	—	—	—	12 0*	—
Concrete Construc. . .	1 0†	0 9*	—	—	—	—
Con. Investments	—	16 6	—	—	—	18 0*
Con. Langlaagtes	22 0†	—	20 6†	—	20 0*	20 0*
Con. Main Reefs	16 6	16 0*	15 6*	15 6*	15 6	15 6*
Con. Mines Selection . .	23 9*	23 6	23 0*	23 0*	22 6*	23 0*
Crown Diamonds	1 6*	1 6*	—	—	—	1 6
Daggafonteins	—	22 0*	22 0*	22 0	21 3*	21 6
Durb. Rood. Deeps . . .	7 6*	—	—	—	7 0*	—
East Rand Centrals . . .	10 6*	10 6*	10 6*	10 6*	10 6	10 0*
East Rand Coals	1 11*	1 11*	—	1 11*	1 9*	1 9*
East Rand Deeps	0 11†	1 0†	1 0†	—	0 9*	0 9*
E.R. Minings	14 0†	11 0*	14 0†	—	—	—
East Rand Props	6 0*	6 0*	6 0*	6 0*	6 3	6 0*
Eastern Golds	1 0*	1 0*	1 0*	1 0*	1 0*	1 0
Frank Smith Diam. . . .	3 4*	3 4*	3 4*	3 4	3 6†	3 6†
Geduld Props.	37 0	37 3*	—	38 0†	37 6†	37 6†

*Buyers. †Sellers. ‡Odd lots. §Ex London.

	Fri. 6th.	Sat. 7th.	Mon. 9th.	Tues. 10th.	Wed. 11th.	Thurs 12th.
Glencairns	1 0*	1 0*	—	1 0*	—	—
Glencoe Colls.	9 0*	12 0†	—	9 0	—	—
Glynn's Lydenburg . .	17 0*	17 0*	—	16 6*	17 0*	17 0*
Govt. Areas	63 3	63 0	62 3	61 6*	61 6	61 9
Jupiters	—	4 3†(ex div.)	—	—	4 0†	4 0†
Knight Centrals	3 6	3 3*	3 3*	3 4*	3 3	3 2
Lace Props.	4 8	4 6*	4 6*	4 8†	4 8†	4 8†
Leeuwpoot Tins	12 0*	—	11 0†	—	11 0†	—
Luipaardsvlei Est. . . .	—	3 0*	3 0*	3 0*	—	3 0*
Lydenburg Farms . . .	7 1*	7 1*	7 0*	—	6 10*	6 9*
Main Reef Wests	3 3*	3 3*	3 3*	2 9*	3 0	—
Middelvel Estates . . .	—	1 0*	1 0*	1 0*	1 0*	1 0*
Modder B.	151 0*	152 0*	154 0†	150 6	148 0	149 6
Modder Deep	132 6	133 6*	132 6*	131 6*	129 6	129 6*
Natal Navigation Col . .	17 9*	—	—	18 0*	—	—
National Banks	230 0*	230 0*	230 0*	230 4*	232 6*	232 6*
New Eland Diam.	26 0	26 6*	26 6*	26 6*	26 6*	—
New Era Cons.	9 0*	8 10*	9 1†	9 1†	8 9*	8 9*
New Geduld Deeps . . .	6 4*	6 4*	6 1*	6 4*	6 4*	6 1*
New Heriots	32 6*	32 6*	—	—	—	—
New Kleinfonteins . . .	17 9	18 3a	17 9*	18 0*	18 0*	18 3*
New Modders	—	430 0†	—	415 0	415 0	415 0†
New Rietfonteins	—	—	—	0 6*	0 6*	—
New Unifeds	—	—	10 0†	10 0†	10 0†	10 0†
Nigels	—	2 0*	—	—	—	—
Nourse Mines	—	19 3	—	18 0*	18 0*	18 0*
Pretoria Cements	84 6*	85 3*	85 0*	84 0*	83 9*	85 0*
Princess Estates	—	1 9*	1 6*	—	1 9*	—
Rand Collieries	2 1*	2 1*	2 1*	2 1*	—	—
Rand Klips	9 0*	9 0	8 9*	8 9*	9 0†	9 0†
Rand Nucleus	1 4*	1 4*	—	—	—	1 4*
Rand Select. Corp. . . .	71 0*	71 0*	71 6*	71 6*	70 6*	70 0*
Randfontein Deeps . . .	4 0*	4 0*	—	—	—	4 6*
Randfontein Estates . .	13 0*	13 0	13 3†	12 9*	12 9*	12 9*
Roberts Victors	—	—	—	8 0†	—	—
Rodepoort Durban . . .	15 0†	—	15 0†	15 0†	15 0†	15 0†
Rooibergs	6 10*	6 9*	6 3*	8 0	7 8	9 6
Ryan Nigels	—	—	—	2 3*	2 6*	—
Shebas	0 11*	0 11*	0 11*	0 11*	1 0†	0 11*
Simmer Deeps	1 9*	1 10*	—	2 0†	2 0†	—
S.A. Lands	4 7*	4 6*	4 6*	4 5	4 4*	4 6
Springs Mines	59 0	58 6	57 9	56 9	56 6	56 6
Sub Nigels	24 4†	24 0*	24 3†	23 6*	23 6*	23 6*
Swaziland Tins	24 6*	25 0*	25 0*	25 0*	25 0*	25 0*
Transvaal Lands	10 0*	10 0*	9 6*	10 0*	—	10 0*
Trans G.M. Est.	14 0*	11 0*	—	13 6*	16 0*	17 0*
Van Ryn Deeps	60 6	61 6*	61 9	61 6	61 3	61 6*
Village Deeps	23 0†	22 0†	—	23 0†	—	22 0†
Village Main Reefs . . .	16 0†	—	—	—	—	—
West Rand Cons.	6 6†	6 6†	6 6†	—	—	—
Western Rand Estate . .	—	1 0*	—	—	—	—
Witbank Colls.	43 0*	—	—	—	—	—
Witwatersrands	—	—	—	39 0†	39 0†	39 0†
Wit. Deeps	12 9†	12 0†	12 0†	10 0*	10 3*	11 0
Woluhutens	8 3*	8 3*	8 6	8 1*	8 1*	8 2*
Zaaipplaats Tins	6 1	5 6*	5 9	5 5	5 5*	5 9*

Union 5 per cent.: 6th, £100½; 7th, £100½†; 9th, £100½; 10th, £100 8s. 9d.*; 11th, £100 11s. 3d.†; 12th, £100 11s. 10½d.†

*Buyers. †Sellers. ‡Odd lots. §Ex London.

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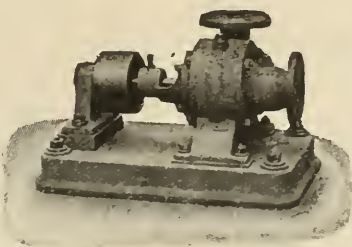
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THE WEEK IN THE MINING MATERIAL AND ENGINEERING TRADES.

The Labour Question—Pooling Making Progress—Freight and Shipping Facilities—Iron and Steel—Linseed Oil and Lead Shortage—Agricultural Machinery.

The feature of the week was the publication of the provisional demands of the miners and mine workers to be presented to the Chamber of Mines. These are not official until approved by the meeting of the Federated Unions this (Saturday) evening, July 14, who have the last "say" on the matter. The news has been taken philosophically in the Commercial Exchange. An occasional remark is heard to the effect that something is always being sprung upon us, and so forth. The real gist of the position is: how much more weight in the shape of costs can some of the poorer mines carry. Hence, misgivings as to whether several of the struggling ones may have to close down, and so affect the community generally.

The pooling scheme is making quiet progress, as the Head Buying and Control Office issued a circular, dated July 4, asking merchants who are members of the Chamber of Commerce and Commercial Exchange to send in stock returns, of some sixty essential commodities, they had on hand on June 30, 1917. In this connection, the Chamber of Commerce Executive recommended their members to comply with the request. The report of that body also states that the committee was pleased to have the assurance of the President of the Chamber of Mines that the mines would continue to buy their requirements through the local merchants, and that as far as possible the orders would be distributed as in the past; and in the speech made by the President of the Chamber of Mines at the quarterly meeting, the assurance was again emphasised, and merchants are pleased to note that he renewed the undertaking regarding the purchase and distribution of orders. In view of these assurances the committee felt that merchants need have no apprehension that they will be unfairly dealt with.

THE TREND OF BUSINESS.

So far, the pooling arrangements have not yet been felt to any extent. Several big merchants say that, although there are a number of orders from the mines, yet they are

more for sorting up lines than any outstanding large orders. They do not expect their July totals in the aggregate will come up to the average as compared with previous months. The merchants have a free hand outside the mine-circle, and as the general run of traders will have to depend upon the Priority certificates to obtain a renewal of supplies, naturally the mining merchants can also resort to that course, in renewing stocks sent to outside mines and to commercial sources generally. However, what is already happening is that those merchants having stocks on hand are catching the trade, whilst others with little or no assortments are beginning to look on, and simply waiting for consignments from overseas. According to several letters inspected, this is a poor look out, as, for example, the controller of oils and fats in London refused to grant permits

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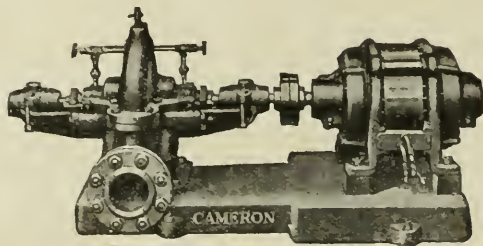
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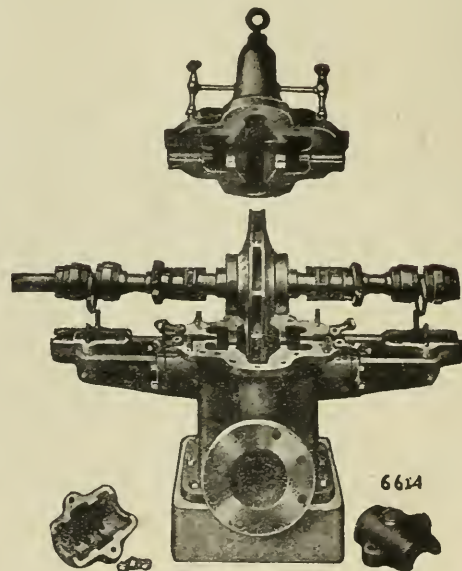
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The Simplicity of Design and High Quality of Material and Workmanship produce a Pump of Extreme Reliability.

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JOHANNESBURG.

for linseed oil, as it was not desirable for linseed oil to leave the country at present; therefore, no facilities could be offered. This letter of advice is dated a month ago, and there was a promise to cable if anything more favourable occurred in obtaining permits; but no cable has since been received. This incident is a good example of what other similar communications contained. To say the least, business is not in a happy mood, but the more enterprising traders are endeavouring to search out other channels for their superabundant energies. For example, now the food supplies are stopped from the United Kingdom, several of the wholesale groceries have taken up the produce line in the way of maize, forage, etc.

THE FREIGHT QUESTION.

According to the manifest of cargo brought out by the last two mails, it is surprising what an immense variety of miscellaneous things came out. Haberdashery, clothing, and boots seem to have been the most prominent; then came painters' drums and stores; also a lot of household chemicals, etc. On the face of things, it almost seemed that the energetic shippers on the other side could almost do better without permits, than those who had all the bother with them. Naturally, the shipping coming out to South Africa must fill up with something or another, and evidently there is plenty of cargo, chiefly in the shape of soft goods always ready and waiting. The real difficulty is in obtaining machinery and mining material, which have to be manufactured by male labour; hence the permit restrictions both for making and shipping facilities. As regards the American shipping facilities, doubts are expressed that this must be an unknown quantity for the next two or three months, as the transfer of half a million troops will require a lot of shipping. Then there will be the constant transshipment of foodstuffs, which will be no mean demand on the freight

market. The actual position is very clear that we cannot expect much relief from America until their war conditions are thoroughly provided for in every detail.

IRON AND STEEL.

The British home position in iron and steel products is closely regulated under official control. The productive capacity is engaged to the fullest extent in order to cope with the phenomenally heavy requirements, chiefly in connection with the war. There is no important alteration in finished iron and steel; but a stronger feeling is manifest, especially in those descriptions of material, the prices of which are not subject to official regulations. The mills are flooded with work for months ahead and are disinclined to increase their engagements. The general demand continues to overlap the supply, and the pressure of working is more intense than ever before. Manufacturers in many cases find much difficulty in securing adequate deliveries of semi-finished steel, while a still greater portion of the output is swallowed up by national work.

America's iron and steel capacity is already severely over-taxed by her huge domestic needs, and the working off of her large export contracts still outstanding. The ship-

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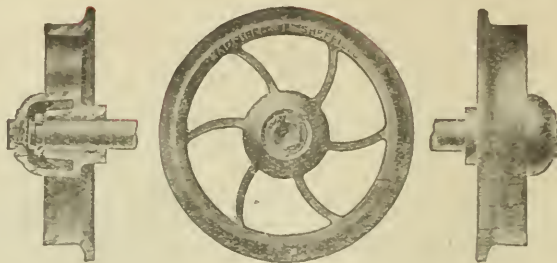
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building yards demands for steel plates and ribs are colossal, and in heavy Tee rails the mills are practically sold up to the end of 1918, and important tonnage have been booked for 1919 shipment. Hence, it is not surprising that American merchants and representatives here are practically out of the steel market for the time being, neither is it surprising that all steel plates available in Johannesburg have been put up to 60s. per 100lbs. basis, and the many kinds cannot be had even at that comparative fabulous price.

LINSEED OIL, WHITE LEAD AND OILMAN'S GOODS.

Linseed oil has advanced from 40s. to 45s. per 5 gallons, and likely to still further rise. White lead is generally quoted at 1s. per lb.; but quantities are not quoted for; therefore, it is usually a matter of negotiation. Turps have gone up from 34s. to 57s. 6d. two-fours, and 59s. 6d. to 62s. 6d. for ten-ones. British plateglass has risen about 3d. per foot, and mirror 6d., whilst window-glass remains much the same. The quote for plateglass is 4s., but cases have been known where 6s. has been paid, as just the thing wanted is very difficult to get as a rule. There is quite a run on second-hand plate, owing to the shortage of the new, and from 2s. 6d. to 3s. is readily paid. Business is uncertain and unsatisfactory, as for example, a telegram was received from the Cape Western Province by a merchant in Johannesburg for two tons of white lead, and 200 gallons of linseed oil, when a reply had to be sent, "Sorry cannot quote."

AGRICULTURAL MACHINERY AND BIG FARM WAGONS.

There is a big demand for maize shellers, and grinders. The latter are wanted to grind the indifferent corn in consequence of certain slight damage occasioned by the frost in some districts. Ploughs, especially the two-furrowed kind are in strong demand. All ploughs are more or less very scarce indeed; but consignments from America and Canada have just arrived at the coast, which will somewhat relieve the position. There certainly should be an opening for the manufacture of ploughs for, although there is a maker of ploughshares in Johannesburg, and now again a few ploughs, there is such a demand, especially after a good season, that there is plenty of room for almost an unlimited number of agricultural implement makers in the Transvaal. For example there is an excellent demand for small hay presses of from 80 to 100lbs. capacity each.

Buck wagons have risen 50s. each during this week; they have been gradually advancing for the past two years. For instance, an average wagon, without tent is now about £93 as compared with £75 in pre-war days. The difficulty now is in getting axles, tyres, and the various parts of the steel and iron fittings from overseas, therefore some works are almost stopped in carrying out anything like an active policy in making new wagons, and just now the farmers are in funds to purchase them. Material is so scarce for even making hand-carts that all the second-hand yards are being searched for the component parts, and particularly wheels.

REVISED PRICE LIST.

Iron, imported, $\frac{1}{4}$ round, 40s. to 55s.; $\frac{1}{4}$ up to 1 in., 37s. 6d. to 50s.; 2 in. to 6 in., 30s. per 100 lbs. Ditto, square, $\frac{1}{4}$ up to 1 in., 20s. to 45s.; $1\frac{1}{2}$ in. to $2\frac{1}{4}$ in., 25s. to 30s.; $2\frac{1}{2}$ in. to 5 in., 25s. Flats, 3-16 in., 40s.; all from $\frac{1}{4}$ in. up, 50s. Angles, $\frac{1}{2}$ in. to 3-16 in., 27s. 6d. to 40s., all sizes; $\frac{1}{4}$ in., 37s. 6d.; 5-16 in. to $\frac{3}{4}$ in., 35s., excepting 5 x 4 x $\frac{3}{8}$ in.; mild steel bar, 5 $\frac{1}{2}$ d. lb., d.ril., 7 $\frac{1}{2}$ d. lb.; steel plates, 10 ft. by 4 ft. by 1-16 in., 62s. 6d.; $\frac{1}{2}$ in. by 3-16 in., 62s. 6d.; $\frac{1}{4}$ in. to 5-16 in., 60s.; $\frac{3}{8}$ in., up to 60s.; 10 ft. by 5 ft. by 1-16 in., 60s.; $\frac{1}{2}$ in. and 3-16 in., 60s. to 62s. 6d.; $\frac{1}{4}$ in. to 5-16 in., 60s. to 62s. 6d.; $\frac{3}{8}$ in., up to 57s. 6d.; intermediate sizes up to 12 ft. by 6 ft. by 1-16 in., 57s. 6d.; $\frac{1}{2}$ in. and 3-16 in., 60s.; $\frac{1}{4}$ in. and 5-16 in., 60s.; $\frac{1}{2}$ in., and up, 57s. 6d., all at per 100lb.; hexagon and cuphead bolts, $\frac{1}{2}$ in. dia., 1s. 9d. lb.; 5-16 in. dia., 1s. 6d. lb.; $\frac{3}{8}$ in. dia. up to $\frac{1}{2}$ in. long, 1s. lb.; $\frac{1}{2}$ in. dia., 11d.; $\frac{3}{4}$ in. and up long, 11d. lb.; $\frac{1}{2}$ in. dia. up to $\frac{1}{2}$ in. long, 62s. 6d.; $\frac{3}{8}$ in. dia. and up long, 11d. lb.; $\frac{1}{2}$ in. dia., 100lb.; $\frac{3}{8}$ in. dia. up to $\frac{1}{2}$ in. long, 55s. 100 lbs. $\frac{1}{2}$ in. dia. $\frac{1}{2}$ in. and up long 52s. 6d. 100 lbs.; $\frac{3}{8}$ in. dia. $\frac{1}{2}$ in. and up long, 50s. 100 lbs.; $\frac{1}{2}$ in. and 1 in. dia., same price as $\frac{3}{8}$ in. diameter; nuts, $\frac{1}{2}$ in., 1s. 3d. lb.; $\frac{3}{8}$ in., 65s.; $\frac{1}{2}$ in. to $1\frac{1}{2}$ in., 62s. 6d.; 1 $\frac{1}{2}$ in. and 1 $\frac{1}{2}$ in., 70s.; 1 $\frac{1}{2}$ in. to 1 $\frac{1}{2}$ in., 75s.; 2 in. up, 85s.; washers, all sizes, 45s.; rivets, 3-16 in., 1s. 6d. lb.; $\frac{1}{2}$ in., 5-16 in., 1s. 3d. lb.; 7-16 in., $\frac{3}{8}$ in., 9 $\frac{1}{2}$ d. lb.; $\frac{1}{2}$ in., 52s. 6d.; $\frac{3}{8}$ in., 55s.; $\frac{1}{2}$ in. up, 49s. 100 lbs.; shoes and dies, 32s. 6d. to 35s. per 100 lbs.; rails, £23 per ton; picks, 4lb. 27s. per doz.; shovels, 32s. 6d. to 55s. per doz.; drill hammer, 5 $\frac{1}{2}$ d. to 6d. per lb.; hammer handles (best American), 14in., 3s. 6d., 24in., 7s., 30in., 9s. 6d., 36in., 13s. per doz.; metal, anti-friction, 1s. per lb.; galvanised iron, 24 gauge, 6 ft. to 10 ft. 1s. 9d., 11ft. 1s. 9d., 12 ft. 1s. 9d.; 26 gauge, 6ft. to 8ft., 1s. 6d., 9 ft.

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and 10ft., 1s. 6d.; flat galvanised, 18 to 24 gauge, 105s.; 26 gauge, 95s. 100 lb.; floor brads, 40s.; ceiling, 42s. 6d.; wire nails, 40s. to 55s.; per 100 lb.; solder, 50 per cent., 2s. per lb.; locks, rim, 60s.; mortice, 70s. per dozen; barbed wire, 45s. per 100lb. coil.

Timber: Deals, Baltic, 9 x 3. short and medium, 1s. 3d.; longer lengths, 1s. 3½d.; (Oregon, 1s. 1d.); flooring, 4½ x ¾ and 6 x ¾, 7½d. to 8d. per sq. ft.; do., 4½ x 1½, 9½d.; and 6 x 1½, 9½d.; ceilings, 6 x ½, 4d. to 4½d. per sq. ft.; pitch pine, 8s. 6d. per cub. ft. Oregon, 6s. 3d. to 6s. 6d. per cub. ft.; clear pine, ½ in. x 12 in., 9d. per ft.; lin. x 12 in., 10d. to 1s.; teak, 15s. 6d. per cub. ft.; jerrah, 9s. 6d. per cub. ft.; poplar, lin. x 12 in., 11½d.; scantling, 1s. 2½d. to 1s. 3½d. per ft., 3 x 9

Bricks, cement, lime, etc.: Pretoria Portland Cement, 9s. 3d. per bag; 8s. 3d. truck loads; lime, white, unslaked, 7s.; truck loads, 6s.; slaked, do., 5s.; blue, 3s.; plaster lime, 4s.; bricks, stock delivered, 37s. 6d. to 45s.; wire cuts, 50s. to 70s.; pressed, 70s. to 80s. per 1,000, road transport difficult to obtain; salt and white glazed bricks, £27 10s. per 1,000; roofing tiles, £25 per 1,000; Roman do., £12½; glazed tiles, 10s. 6d. to 17s. 6d. per yrd; paving cement tiles, 8s. 6d. per yrd laid; reinforced concrete columns, 6 ft. pair, 22s. 6d.; fluted, 24s.; fireclay bricks, £7½ to £9½, at kiln, per 1,000; clay chimney pots, 36s. to 70s., according to height, 12 in. to 18 in., per doz.; fire clay, 37s. 6d. per ton on rail.

Oils, paints, lead, oxide, glass: Linseed, raw and boiled, 45s. per five gallons; white lead, 1s. per lb. (big lots not quoted); turpentine, 57s. 6d. 2¼ gallons; 10/1. 62s.; oxide in oil, 36s. per 100 lbs.; dry oxide, 22s. 6d. to 27s. 6d.; linseed oil putty, 4s. 9d. per 12½ lbs.; bladders, 38s. 6d. casks of 100lbs.; grease, A F axle, 26s. 6d. to 28s. 6d. per 100 lbs.; tallow, 1s. per lb.; White Rose paraffin, 18s. 3d. 2/5; Laurel do., 18s.; petrol, 29s. 6d. 2/4; motor oil, 7s. to 7s. 9d. per gal.; engine lubricating oils, 27s. to 40s. per case; cylinder, 20s. 6d. to 42s. 6d.; paints in tins, 1s. per lb.; British plate-glass, ¼ in., 3s. 9d. to 4s.; do., mirror, 5s.; window, 16 oz., 1s. to 1s. 3d. ft

Chemicals: Mercury, £50 per 75 lb. bottle last sale, but now no definite price; bichromate potash, 5s. 6d. lb.; chlorate, 4s. 6d. per lb.; permanganate, 14s. lb.; alum, 5d. lb.; carbolic acid, 7s. 6d. lb.; borax, 92s. 6d. 100 lbs.; cyanide soda, 1s. 5d. lb.; hypo, 7d. lb.; acetate lead, 77s. 6d. 100 lbs.; litharge (assay), 72s. 6d., (commercial) 58s. 6d. 100 lb.; zinc sheets and blocks, 1s. 6d. lb.; plumbago crucibles, 5d. per number.

Electrical goods: Lamps, high volts, British, Holland, and American, 36s. wholesale, and 54s. dozen retail; carbon lamps, 10s. 6d. dozen; pure rubber flex, 6d. to 8d. per yard; 3/20 coils of wire, 30s. to 33s.; do., 3/22, 23s. 6d.; tubing, 18s. to 20s. 100 ft.; keyholders, 6s. to 7s. 6d. each, round blocks, 3½ in., 3s. 6d. doz.; lamp holder cord grips, 13s. 6d. to 15s. per dozen; switches, 5 amp., 24s. to 30s. doz.; British glass shades, 30s. to 40s. dozen, porcelain shackles, 15s. to 18s. dozen; do., bobbins, 12s. 6d. to 14s. per 100; cleats, 20s. per 100; P.O. insulators, 18s.; motor, 3 h.p., about £35 to £37, new.

In consequence of the daily, and even hourly, variation in prices, the Editor will answer reply-paid telegrams to verify any quotation in our list.

Zaaiplaats Tin June Output.

The following are the results of operations for June:—Days run, 26; ore milled, 2,383 short tons; residues re-treated, 500 short tons; concentrates won, 37 long tons; average value of concentrates, 70 per cent. M.T.; estimated profit for the month, excluding Government taxes on profits, £550 18s. 4d.; add adjustments in respect of estimated values of previous shipments, £261 14s. 10d.; profit declared for the month, £812 13s. 2d. Revenue for the month has been calculated on the basis of tin at £215 per ton.

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The Sheba in June.

The output of the Sheba Mine for the month of June, 1917, was as follows:—Tons crushed, 5,597 tons; yielding, 1,692 ozs.; working expenses, £7,518; development, £1,200; capital expenditure, £136; estimated loss, £1,980.

Leeuwpoort Tin June Output.

The report of operations for the quarter ended June 30 is as follows: Stamps, 17 (including 2 Nissen); time run, 82.42 days; tons crushed, 11,326 short tons; concentrates won, 215 long tons. Average assay value of concentrates is 61.36 per cent. metallic tin. Average price of metallic tin on which the quarter's revenue has been determined is £214 15s. per ton. Estimated profit, £5,722 18s. 8d. Adjustments in respect of previous shipments, £208 14s. 2d. Profit declared for quarter, £5,931 12s. 10d. The sum of £782 9s. has been expended for new tin dressing plant, machinery, buildings, shaft sinking, etc. During the quarter a sum of £3,418 16s. for development redemption has been included in working costs.

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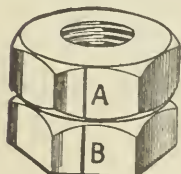
"A set of 'VISLOK' tappet nuts which has seen considerable usage in one of my DORMAN engines seems to overcome all these drawbacks, and is very efficient. IN FACT, I FEEL SURE THE NUTS HAVE NOT BEEN TOUCHED FOR SEVERAL HUNDRED MILES, WHICH IS EXTRAORDINARY WHEN IT IS REMEMBERED THAT IN THIS DISTANCE EACH VISLOK HAS RECEIVED A MILLION OR MORE IMPACTS.

Vislok tappet nut resembles a divided hexagon nut capped but actually consists of two nuts hydraulically pressed together, with a common thread. Vislok is screwed to the valve stem as an ordinary nut, and, when the correct clearance is obtained, is locked by moving out of register the markings that appear on the hexagon faces. To unlock, the markings are brought to register when the Vislok may be simply unscrewed.

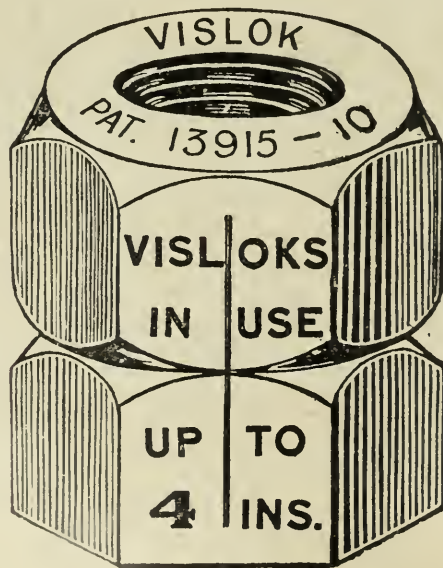
The "Vislok" tappet will be found convenient for modernizing ancient mounts, as it is only necessary to remove the valves and thread the stems with a standard die. The "Vislok" then replaces the old valve cotter, and the troublesome task of TAKING UP VALVE GEAR WEAR IS REDUCED TO A FIVE-MINUTE JOB."

Motor Cycling, Nov. 14, 1916.

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Fight.

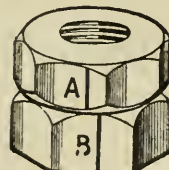


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Company Meetings.

GOERZ AND CO.

Mr. H. Newhouse presided at the annual meeting of A. Goerz and Co., on July 6th, and in moving the adoption of the report of the directors and statement of accounts, said:—Gentlemen,—The anticipations in which I ventured to indulge at our last annual meeting have been justified. The value of the output of gold of our group of mines has further advanced to £1,830,000 for the year, which is 12½ per cent. better than in 1915, and the result is reflected in higher profits of the mines and, therefore, in our accounts. Before considering writings-off, we showed a loss of £295 for 1914, while there was a profit of £39,845 for 1915, and of £97,497 for 1916. The item of dividends and interest in the three years has amounted to £19,610, £30,054 and £101,408 respectively. Realised profits on sale of shareholdings figure at only £18,958 for last year, as compared with £30,818 in the previous year, and this low figure is largely due to the restricted state of the share markets under war conditions. Our expenses at £24,553, are within £90 of what they were in 1915, but it will be within your recollection that they amounted to £39,321 as recently as 1913, and probably the limit of reduction has been reached for the time being. We use the whole of the profit for the year, in addition to £18,633 brought forward from 1915, for writings-off, almost entirely in respect of shareholdings, and so there is no amount to be carried forward. With regard to the balance sheet, the item of sundry creditors has dropped from £543,302 to £416,593. This item consists for the main part of deposits made with us by affiliated companies and the reduction is mainly due to these deposits being reduced as amounts are required by those companies for capital expenditure. Advances to affiliated companies and other debtors show a small reduction of £7,015. The excess of cash assets, Government securities and sundry debtors over liabilities is £244,322 as compared with £94,001, an advance of £150,321. Our share and debenture holdings, taken at or under cost, stand at £1,111,274, a reduction of £169,004, accounted for partly by realisations, but mainly by the £115,998 written off. I shall deal with the proposed reduction of our capital at the meeting which is to follow.

Profits of Subsidiaries.

As regards the operations of the mines controlled by your company, you will have seen from the Consulting Engineer's report that the year has been one of progress. Their combined profits, including sundry revenue, amounted to £635,212, or 34 per cent. more than the 1915 total. Chiefly owing to the increase in the capacity of the Modder Deep plant to 40,000 tons per month in the latter half of the year, the tonnage milled was increased by 83,680 tons, and the value of the output by £222,832, the average yield being 1s. 8½d. per ton milled higher, mainly due to the influence of the two mines in the far eastern area. The average working costs—which include every item of expenditure with the exception of that

on capital account and for Government taxes—were 4d. per ton milled lower at 19s. 4d., and this reduction must be considered very satisfactory for the experience of our mines is that the war conditions added approximately 9d. per ton milled to working costs up to the end of 1915, and a further 9d. in 1916, while compensation under the Miners' Phthisis Acts, higher rates of pay to mechanics and engine-drivers, and increased leave pay to all employees added a further 4d. during the two years to the end of 1916. It is needless to say that results such as these are due to the hearty co-operation of all concerned and I have every hope that this satisfactory state of affairs may continue.

Modder Deep Levels.

Chiefly as the result of the additions to the plant, which came into operation during the latter half of 1916, the tonnage milled exceeded that of 1915 by 64,000 tons, the average yield at 37s. 9d. being 3s. 4d. more than that of the previous year. For the first six months of the current year the average has still further increased to 33s. 7.24d. Working costs were reduced by 9d. per ton to 16s. 4.2d., which average was maintained for the first four months of 1917, while in May and June there has been a further reduction to just under 16s. per ton—a noteworthy record. As a result the working profit amounted to £486,963, or £143,534 more than in 1915, the rate per ton milled being 21s. 5.4d. During the first half of this year the average has been 22s. 3.63d., and the total £270,585, last month's figure of £47,908 being the highest yet attained. The net profit in 1916, after adding sundry revenue and deducting Government taxes and donations to charities and war funds, was £420,851. Capital expenditure absorbed £39,397 of this, leaving £381,454 available for distribution, which would have permitted dividends totalling 75 per cent., but, in view of the increase in the value of stores carried and the desirability of pursuing a conservative policy in these times, only 67½ per cent. was distributed and the amount carried forward was increased from £37,507 to £81,642. During the current half-year a further amount has been invested in stores and though the company was in a position to pay a dividend of 42½ per cent. for this period, after providing for capital expenditure, taxes, etc., it was considered prudent to declare only 40 per cent. Thus, in its first 2½ years of production, the company has distributed to its shareholders 23s. 6d. per share in dividends on its £1 shares and has in addition provided out of profits for the capital expenditure required to complete its original plant and for its subsequent extension, while a substantial balance remains to the credit of appropriation account. Provided nothing unforeseen occurs a further increase in the dividend may be expected for the second half of this year. In the course of the next three months some further improvements in the plant will be completed which will have the effect of enabling the monthly tonnage milled to be increased by about 1,500 tons and the working profit by about £1,800 per month. The mine and reduction works are respectively well able to supply and deal with this increased tonnage.

Development.

The development work done during the year was much more than sufficient, both in tonnage and value, to maintain the ore reserves position. The tonnage was increased by 650,000 tons, while the width was five inches greater and the value somewhat higher at 8.4 dwts. The reserves of 3,320,000 tons developed at the end of the year are sufficient to feed the present mill for approximately seven years and their profit value exceeds the market capitalisation of the company. Development has continued to be highly satisfactory since the end of the year, the results for the six months being 2,625 feet giving an assay value of 13.8 dwts. over 49 inches, which includes as usual both payable and unpayable footage. It is worth mentioning that the increase of nine inches in the calculated stopping width during the last two years means an increase in the ore contents of the mine of about 4,000 tons per claim and a corresponding extension of its life.

Geduld Proprietary.

Though the plant, as it stood last year, was designed for a capacity of 24,000 tons, the monthly average was nearly 27,000 tons, the total for the 12 months being 322,980, or 19,540 more than in 1915. The average yield was 4d. per ton higher, but at 31s. 2.7d. was, in view of the high proportion (27½ per cent.) of ore taken from development faces, somewhat more than was called for by the average value of the ore reserves at the end of 1915. Working costs remained stationary, in spite of the increases due to the war conditions, which were estimated to amount to 1s. 4d. per ton milled at the end of the year. It must not be overlooked that those costs include the heavy expenses for pumping and bailing the considerable quantity of water encountered in the workings, which last year were equivalent to 2s. 7½d. per ton milled. The working profit at £155,630 showed an increase of £14,220, and in addition there was sundry revenue totalling £15,834. Of the net profit of £150,317 remaining after deduction of Government taxes, donations to charities and war funds and depreciation, £97,000 was distributed in two dividends of 5 per cent. each, and the balance was set aside for capital expenditure, which totalled £184,126. A considerable amount has been and has still to be spent on capital account during the current year, though the total will be much less than in 1916. The heavy expenditure underground is due to the desire of the board to prepare the mine for a further increase in the capacity of the reduction plant as soon as underground work justifies this, and it is partly with the object of placing them in a position to provide the company with the large sum which will then be needed that the directors are seeking power to increase the capital of the company to £1,500,000. These extended powers are also being sought partly with a view to a possible extension of the company's sphere of operations. An opportunity for this may be afforded by the new lease areas which have recently been offered for tender by the Union Government, some of which could be worked advantageously in conjunction with the company's present property, and, in the event of the directors deciding to submit tenders for any of these, and being successful, it is considered essential that they should be in a position to raise the necessary capital at short notice. I may mention that the directors of the Geduld Company have no intention of exercising these powers unless and until either or both of these circumstances do arise.

Chiefly owing to the large sum invested in surplus stores, it became necessary for the Geduld Company to make arrangements in March last to obtain temporary advances from your company to enable it

to meet further items of capital expenditure as were in excess of the monthly profits, the directors of the Geduld Company, deeming the time opportune for dealing with the *dividend* reserve surplus at their annual meeting. The company, however, in now repaying the benefit of its large expenditure, and the greatly increased profits, will enable the debt to be repaid at a comparatively early date.

Reduction Plant.

The construction of the additional plant, bringing the capacity of the reduction works to 15,000 tons per month which I anticipated, when commencing a year ago, was completed before the end of last year, and it is now being run at full capacity for several months, due to the fact that the plant is running very satisfactorily, but the tonnage of the ore has not been increased. Before the end of the current year on account of the need to renovate the old mill of substituting concrete for the wooden foundations, which for years past have been unsatisfactory and given much trouble. Under these circumstances the tonnages of 35,000 and 35,000 reached in April and May respectively are very satisfactory. Owing to this increase working costs were reduced to about 18s. 6d. in April and 18s. in May, and the working profit for these months increased to £18,383 and £19,350 respectively. The tonnage milled dropped to 3,000 last month, hence working costs were somewhat higher. The working profit was £18,973. When the repairs have been completed there should be a further substantial increase in the tonnage milled.

The considerable quantity of water tapped in November, 1915, seriously influenced the company's operations during 1916, not only involving heavy expenditure to cope with it, but being the cause, directly and indirectly, of the stoppage of development work below the second level and the disorganisation of other work. As a provision against a recurrence of these difficulties further pumping plant has been installed and duplicate cables have been provided from the surface to the third level, a distance of 6,300 feet, where a dam has been constructed on this level, which has reduced the inflow by approximately 20 million gallons per month. It is partly due to the influence of this dam and partly to the increased tonnage milled that pumping and hauling costs have fallen to an average of 1s. 5½d. per ton milled for the last three months. It was not until 12 months after the inflow occurred that the whole of this section of the mine could be dewatered and development work resumed. Taking these troubles into consideration, the development footage, including shaft sinking, of 14,121 feet—was an increase of 1,834 feet over the previous year—must be considered very satisfactory. As the result of this, the ore reserves were increased to 2,150,000 tons, the stoping width being practically unchanged at 60 inches, and the average value slightly lower at 7.4 dwts. During the year sinking was resumed in the incline from the No. 3 shaft, where no work had been done during the previous five years, and it is intended to push on the work there, as well as the sinking of the intermediate incline shaft, with the object of gaining information regarding the southern portion of the property. The No. 2 incline shaft is also being continued. During the first half of the current year 6,685 feet have been sampled, and the average assay value of this footage, including as usual the unpayable as well as the payable, is 6.3 dwts. over a width of 46 inches.

Princess Estate.

The outstanding feature of the year's operations was the comparatively substantial reduction in working costs of 10d. per ton milled—in spite of a further increase of 8d. in war costs, bringing the total under this head to 1s. 10d. per ton crushed. The decrease is mainly attributable to the centralisation of operations, due to the cessation of the ore in the outer section. Unfortunately this was partly offset by a drop of 5d. in the yield, the working profit being £7,003, which was brought up by sundry revenue to £11,935. Capital expenditure amounted to only £5,025, while,

owing to development work having again to be restricted for want of the necessary funds, the amount redeemed in excess of the expenditure in this respect was £12,405. As the result, the net liabilities of £13,132 at the end of 1915 were converted into a surplus of cash assets over liabilities of £1,250. Owing to the heavy investment in stores, the company is still indebted to your company, the amount at date being approximately £3,150.

The results during the first six months of this year have not shown any striking variation from those of 1916. The ore reserves position has naturally suffered from the enforced policy of restricted development. The total developed at the end of last year was 12,000 tons down at 476,000, while the value was slightly higher at 7.1 dwts. over a milling width of 30.4 inches. No change has taken place in the development policy during the current year, and consequently there has been a further falling-off in the ore reserves tonnage. On the other hand, there are indications that a greater proportion of Main Reef is payable than had been anticipated, while the value of the South Reef in the lowest level has continued to be satisfactory. The company has continued to experience trouble in maintaining its Central Deep and No. 2 incline shafts, as the result of which the hauling of rock through the latter was discontinued in the second half of last year. Practically the whole of the ore mined is now being dealt with through the Nos. 1 and 2 vertical shafts.

May Consolidated.

Since I last addressed you this company's long and successful career has been brought to a termination and the company has been placed in liquidation. The movement of the strata, due to the effect of heavy rains on ground completely undermined, became serious round about March 10th, and made such rapid progress as to render work underground too dangerous to continue, and, as the quantity of ore available from the outcrop was too small to be profitably dealt with, there was no alternative to ceasing operations. The first liquidation dividend has been declared, namely, one Modderfontein Deep Levels share for each ten May Consolidated shares and two shillings in cash per May Consolidated share, delivery and payment of which respectively will be made about the middle of September next. As a result of its life of nearly thirty years, the company will distribute more than six times its capital in the shape of dividends, including those distributed by the liquidators. Up to the date of liquidation it had paid 527½ per cent.; it is now paying a further 10 per cent. in cash and the equivalent of 65 per cent. in shares, while a further cash distribution of 5 per cent. is possible, which will make a total of 607½ per cent.

Mexico.

The position in Mexico is much the same as it has been for years past—that is to say, it is unsatisfactory—and neither the La Fe Mining Company nor the San Francisco Mines of Mexico have been able to resume work, though both are only too anxious to do so in view of the prevailing high prices of metals. I am glad to say that, notwithstanding the state of affairs in the Republic, there has been very little actual disturbance or damage to the properties, and pumping has continued without intermission at the La Fe Mine.

General.

The continuance of the war and the difficulties experienced in carrying on work with materially reduced staffs—difficulties shared in common with a large number of other enterprises—have caused many anxieties during the year. In spite of this, I think we can point with some pride to improved results and better prospects, and the thanks of the company are due to the management and staffs for arduous services unflinchingly rendered. I much regret to inform you that Mr. E. W. Durr, an old and much-valued member of the Johannesburg staff, died of fever while on active service. Our sincere sympathy

goes out to his relatives. At the beginning of this year Mr. P. M. Anderson was appointed consulting engineer of the company. Mr. Anderson has been connected with us for many years, and has a thorough knowledge of our mines, having been first of all assistant to your late consulting engineer, Mr. W. McC. Cameron, and subsequently general manager of the Princess Estate and Geduld Proprietary Mines. I now beg to move: "That the directors' reports and accounts for the 1916 financial year of the company ended December 31, 1916, be, and they are hereby, received and adopted."

Mr. Forbes seconded, and the motion was carried unanimously. The retiring directors were re-elected and the auditors reappointed.

At the conclusion of the annual meeting of shareholders in Goerz and Co., on July 6th, an extraordinary meeting was held to consider the proposals dealt with in the circular issued to shareholders. The Chairman said:—In view of the full character of our circular of April 27th, it will not be necessary for me to detain you long in connection with the business of this meeting, which has been called to consider the reduction of the capital and the adoption of new articles of association.

At the meeting just closed I showed the amount of our profits, apart from writings-off, and you will see that, if there had been no need to consider depreciation, we could have paid a dividend for 1916. But, as I pointed out last year, we still had considerable depreciation on certain shareholdings which has accumulated since 1910, for which it would be necessary to provide in some manner before we could resume the payment of dividends. We have never followed the principle of writing up our assets in cases where they show an appreciation, and we have always, when the profits have permitted, written down our shareholdings to market prices or to the directors' valuations, where such prices or valuations were below cost. In following this practice, which we have unfortunately been compelled to suspend since 1910, we have marched in company with the great majority of similar concerns, and the directors are desirous of reverting to the practice as soon as possible, believing that any other procedure would not be prudent. Now that we have profits available, we have devoted them, as far as they go, to such writings-off, but if we were to continue to use profits for this purpose the shareholders would be kept out of dividends for a considerable period, and though we should thereby further strengthen the company's financial position, as we have done during the past year, by continuing to appropriate profits in this way, the directors do not think it reasonable to ask the shareholders to wait until this long process comes to an end before they again enjoy dividends on their shares. My statement at last year's meeting will, in fact, have prepared you for the proposal which is now before you—that the capital of the company should be reduced by the sum of £525,000 by writing down the nominal value of each share in the company from 20s. to 12s. 6d. The reduction will suffice to reduce all our share and debenture holdings to market prices, or to the directors' valuations where there are no market prices, and will further enable us to write down the book cost of other assets, particularly advances to affiliated companies and claim holdings.

Mexican Interests.

A large amount to be written off in respect of our interests in Mexico, particularly in the La Fe Mining Company, to which we have had to make very considerable advances to enable it to pay for the balance of its equipment and to preserve the property. I need not remind you of the condition of affairs which has prevailed in that country for some years past. It has exercised an unsatisfactory influence on our interests there and has prevented those interests from being turned to proper account, seeing that production has been out of the question. Another important item arises in connection with our holding of shares in the Princess Estate and Gold Mining Company, due mainly to our having guaranteed a large issue of shares at 27s. 6d. less 5 per cent. commission, in connection with the amalgamation scheme carried out in 1911. The shares are to-day quoted at a mere fraction of this price, owing to the deterioration in the prospects of the company. Rather more than half of the writings-down contemplated will be in respect of our Mexican interests and the balance in respect of our Transvaal interests, and when they have been effected we consider that the assets generally will stand in the books at conservative figures. The directors recommend the proposal to you with confidence, and are glad to say that it has met with the support of the shareholders generally. It will free profits from this year onwards for purposes of dividends, and I hope and believe that we shall be able to make satisfactory distributions in the future. The reduction is, of course, as you will have observed, subject to the sanction of the Court.

Articles of Association.

I will now deal with the proposed new articles of association. Our present articles date back to 1897, i.e., to the time when the company was formed. In those days the Limited Liability Acts of the Transvaal were very simple affairs, containing only a few clauses, but the passing of the Transvaal Companies' Act of 1909—which was mainly a reproduction of the English Act—greatly increased the number of clauses and introduced into Transvaal company practice a large number of changes derived from England, and we have more and more felt that our articles required bringing up to date. Many other companies, of course, adopted new articles years ago, in consequence of the Act of 1909. Our articles have been completely revised, as is indicated by the fact that the number of clauses has been increased from 122 to 173, and they are based upon the best English forms. It would be impossible to deal with the articles in detail and copies of them have been available to all shareholders who have cared to apply for them, but the principal changes are set forth in the circular which you have all had. You will notice at once that many of the changes to which we call your attention are due to the proposed reduction of capital. Of the 15 clauses referred to in the circular, one-third are necessarily altered because of the reduction of capital. For instance, the present provision for the borrowing powers of the directors refers to half the issued capital of the company, with a general authority, granted by shareholders' resolution, to borrow to such an extent as the exigencies of the company's business may require;

i.e., the present borrowing powers amount to £700,000 plus an undefined amount. It is proposed instead to limit the borrowing powers to the amount of the issued capital for the time being; i.e., for the present to £875,000, which is in effect a lower limit than that now existing. The qualification of a director remains at 1,000 shares, though these will, of course, now be shares of 12s. 6d. instead of 20s. The remuneration of the directors is at present fixed at 5 per cent. of the surplus dividends paid in any year in excess of 6 per cent. on the capital, with a minimum of £2,500 per annum. The new articles raise this 6 per cent. to 10 per cent. on the capital, i.e., in view of the reduction of capital the proportionate figure should be raised to 9.6 per cent., but for simplicity's sake it has been rounded off to 10 per cent. A simple calculation of the effect of the clause will show you that the directors will not receive any remuneration beyond the minimum of £2,500 until the dividend in any year exceeds 15 per cent., and I may say that the directors have not since 1913 drawn even the minimum to which they are entitled.

Powers of Directors.

The directors, under the existing articles, are required to obtain the consent of the shareholders before the company is bound in respect of any "contract or arrangement for the acquisition by purchase, amalgamation or otherwise of the assets of any other company or person or of any other property" where the liability upon the company involves a sum exceeding one-fourth of the issued capital. That is to say they are at present prevented from entering into a business where the commitment in connection with that business is in excess of £350,000, but the effect of leaving this provision unchanged would, in view of the reduction of capital, have decreased this amount to £218,750. Under the new Articles this provision—which is an unusual one for companies of this kind, directors ordinarily being given the same powers as the company itself can exercise—is therefore proposed to be omitted altogether. This is suggested not merely because the lower figure would be very inconvenient in practice, since propositions as a rule will not wait during the many weeks required to call shareholders together, but because it may be necessary to enter into a transaction involving a much larger amount than £218,750, even though the amount retained by the company for itself, after dividing up the business with others—that is its effective as distinct from its nominal liability—might be well within the limit.

A Round Million.

The directors at present have the right, by resolution of the shareholders passed in 1904, to issue 100,000 new shares, which would have made the issued capital, if the right had been exercised, £1,500,000. It is proposed, in place of this, that you should authorise the directors to increase the capital from the reduced amount of £875,000 to a round £1,000,000. In order to avoid any misapprehension I may say that the directors have no immediate issue of shares in mind. With regard to Clause 101 I may explain that a finance company like ourselves usually does not do any new business entirely by itself, but disposes of a part

of it to its associates or others. In this way it is enabled to handle larger transactions than would otherwise be practicable and, in effect, it is enabled to reduce its risk in any particular transaction by a species of reinsurance. As associates it would naturally prefer to choose those with whom it is in most intimate touch, and the directors might be members of the Board of subsidiary, allied or other companies, or members of firms doing similar business. Such companies or firms would, in the ordinary course, be likely to join with us in our financial operations, in which case it might be difficult on occasion to obtain an independent quorum, and the Article has been revised to meet this contingency. You will note that the provision applies only where the company or firm in which the voting director is interested "participates with the company on terms not more favourable to the participant than those enjoyed by the company," i.e., to cases where the director's indirect interest is identical with, if not less favourable than, that of the company. Further, the new Articles reduce the minimum and maximum number of directors, the notice required for general meetings and the quorum at general meetings, and for the rest it may be said that they are very largely in common form.

The Resolutions.

I now beg to move:—

(a) "That the capital of the company be, and the same is, hereby reduced from £1,400,000, divided into 1,400,000 shares of £1 each, to £875,000, divided into 1,400,000 shares of 12s. 6d. each; and that such reduction be effected by writing off paid-up capital to the extent of 7s. 6d. share upon each of the 1,400,000 shares which have been issued and are now outstanding, and by reducing the nominal amount of all the shares in the company's capital from £1 to 12s. 6d.

(b) That the draft new Articles of Association of the company, which have been submitted to the meeting, whereof Document "A" embodies those provisions which would have been contained in the Memorandum of Association had the company been formed under the Companies Act 1909, Transvaal; and Document "D" contains the provisions which would be found in like circumstances, in the Articles of Association, be and the same are hereby approved of.

(c) That the new Articles of Association contained in Document "B" laid before this meeting, and for the purpose of identification subscribed by the chairman thereof, be and the same are hereby approved, and that such Articles of Association be and the same are hereby adopted as the Articles of the Association of the company, to the exclusion of and in substitution for all the existing Articles of Association thereof, except those contained in Document "A" laid before the meeting, which would have been contained in a Memorandum of Association if the Company had been formed under the Companies Act 1909, Transvaal, which shall remain unaffected.

Mr. Overbeek seconded and the resolutions were carried nem con.

Those present at the meetings were Messrs. H. Newhouse (chairman), F. W. Forbes, J. B. Overbeek, H. B. Walker, and V. J. Ronketti (secretary).

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NOTICE TO SHAREHOLDERS.

NOTICE IS HEREBY GIVEN that the Ordinary General Meeting of Shareholders in the above Company will be held in the Board Room, Consolidated Gold Fields Buildings, Simmonds Street, Johannesburg, on Friday, 24th August, 1917, at 11.30 o'clock in the forenoon, for the following purposes:—

1. To receive the Reports of the Directors and Auditors, and to consider the Balance Sheet as at 30th June, 1917, and Statement of Income and Expenditure for the year ended 30th June, 1917.
2. To elect three Directors in the places of Messrs. D. Christopherson, W. S. Smits and F. Leslie Brown, who retire in accordance with the provisions of the Articles of Association, but are eligible and offer themselves for re-election.
3. To elect an Auditor for the current year, and to fix the remuneration of the past year's audit.
4. To transact such other business as may be transacted at an Ordinary General Meeting.

The Transfer Books of the Company will be closed from the 17th to the 24th August 1917, both days inclusive.

By Order of the Board,

The Consolidated Gold Fields of South Africa, Ltd., Secretaries.

Per A. C. GRANT.

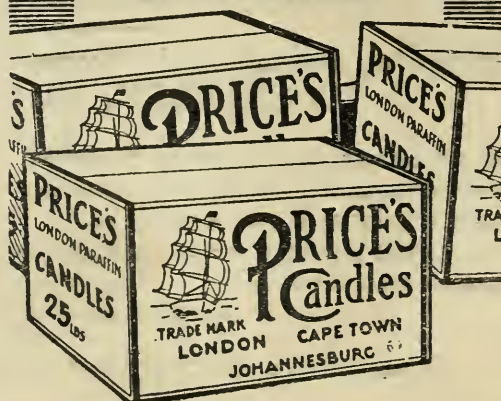
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